IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF PENNSYLVANIA

MARK E. FIX,	)	
	)	
Plaintiff,	)	
	)	
v.	)	**C.A. No. 04-97 Erie**
	)	
UNITED STATES OF AMERICA, et al,	)	
	)	
Defendants.	)	

OPINION

I. Introduction.

On April 1, 2004, Plaintiff Mark Fix filed a Complaint against Defendant United States of America and the United States Bureau of Prisons ("BOP"). The BOP was dismissed from the case as an improper party and the case has proceeded only as against Defendant.

Plaintiff's Complaint against Defendant is brought pursuant to the Federal Tort Claims Act ("FTCA"). Plaintiff claims that Defendant's failure to diagnose and treat his Lyme disease caused or was a substantial contributing factor in causing his Optic Neuritis. To the contrary, Defendant contends that Plaintiff never had Lyme disease, and that Plaintiff's Optic Neuritis was solely caused by Multiple Sclerosis. The non-jury trial of this matter began on February 27, 2007 and concluded on March 1, 2007.

II. Factual Findings.

A. Plaintiff's relevant personal and medical history.

Sometime in 1998, Plaintiff was arrested on drug-related charges. He pled guilty in federal court and was sentenced on December 16, 1998 to 31 months imprisonment. Thereafter, on or

about February 17, 1999, Plaintiff self-reported to the Federal Correction Institute at McKean ("FCI McKean"), a federal correctional facility located in the Commonwealth of Pennsylvania. Plaintiff did have any problem with his vision prior to his incarceration at FCI McKean. He did not even wear glasses.

While incarcerated at FCI McKean, Plaintiff was stationed in the facility's satellite camp. This satellite camp sits on top of a hill and is not fenced in. Inmates can walk wherever they want. The camp is located in a park-like setting, in the middle of a wooded area. While Plaintiff was at FCI McKean, he saw deer, chipmunks, and other small animals all the time.

One of the things Plaintiff frequently did while at FCI-McKean, was to walk around the track that surrounded the softball field and then sit in the grass. If the weather was nice while Plaintiff was walking around the grounds at FCI McKean, he would roll his pants up.

Plaintiff first noticed two insect bites on his body on the afternoon of Friday, May 12, 2000. Plaintiff was outside, with his pants rolled up, sitting by the camp's bocce court. One insect bite was by his ankle bone and the other bite was located on the inside of his knee. At the trial Plaintiff described the bites as follows. Plaintiff saw a strange pimple-like bite on his leg. The bites were flesh-colored and raised. The bite on his knee was surrounded by a red circle the size of a quarter and then surrounded by a lighter red circle the size of a tennis ball. The bite on ankle was similar to the bite on his knee. The bite was reddened. It was maybe the size of a quarter. The center was minimally raised-1/16 inch. It felt different to Plaintiff. The area around the bite was red. Plaintiff had never seen anything like it before.

Plaintiff recalled that two or three weeks prior to seeing these bites, he had been bitten by something. Plaintiff also testified that in the two or three weeks before he saw the bites, he had

suffered from headaches, muscle aches and pains, and his neck hurt. The aches and pains were not constant; they came and they went. Plaintiff also felt tired during this time period, as if he had the flu.

Plaintiff decided to wait a few days to see if the bites went away. When they did not go away by May 15, 2000, Plaintiff went to "sick call." At sick call, Plaintiff saw Mr. Hamandi, a physician's assistant employed by Defendant.

Plaintiff testified to the following about the May 15, 2000 sick call visit. Throughout the visit, Mr. Hamandi sat at his desk which was located approximately four to six feet away from Plaintiff. He never got up and examined the bites. Mr. Hamandi asked Plaintiff what was his problem. Plaintiff told Mr. Hamandi that he had these bites on his leg. Mr. Hamandi told Plaintiff to roll his pants up. Plaintiff pointed to the bite on his knee; he was concerned that there was redness. Plaintiff questioned Mr. Hamandi as to whether they could be spider bites. Plaintiff said he had not seen what had bit him. Mr. Hamandi also noticed that Plaintiff had a cold sore on his lip and that he asked Plaintiff about the cold sore. Ultimately, Mr. Hamandi said "spider bites" to Plaintiff and gave Plaintiff a prescription for hydrocortisone, a topical ointment, which Plaintiff picked up at the prison pharmacy.

Mr. Hamandi completed a treatment note on Plaintiff's May 15, 2000 'sick call" visit. The treatment note first discusses the lesion on Plaintiff's lip, the cold sore, and then discusses the bites. Defense Exhibit A, p. 269 and 269b.

Mr. Hamandi's deposition transcript from December 16, 2000 was introduced by the Plaintiff at trial. Mr. Hamandi recalled seeing Plaintiff on May 15, 2000. Mr. Hamandi testified that during that visit, he saw two (2) lesions on Plaintiff's leg. Mr Hamandi explained that a

"lesion" means that there was redness. He further described the bites as circular, the size of a quarter; the rash was slightly red, not too deep, with the redness being the same throughout, and itchy. There was no pimple, no area of target, and the bites did not look like the erythema fragments of Lyme disease. Mr. Hamandi also testified that he prescribed hydrocortisone cream because he thought, due to the redness and itchiness, that Plaintiff had had an allergic reaction to the bites. Mr. Hamandi also testified that during the visit Plaintiff did not complain to him about joint pain, fatigue, or malaise.

Mr. Hamandi also explained that he wrote a spider bite on the treatment note because Plaintiff told him that he thought it was a spider bite. Mr Hamandi said that he used a question mark on the report because he was not sure if it was, in fact, a spider bite.

Mr. Hamandi never received any instruction or training about Lyme disease at FCI McKean. It was Mr. Hamandi's understanding that "[w]hen there is area of tick and when the type of rash and the general condition of the patient, you might start antibiotic." Hamandi deposition, p, 45. Otherwise, he would not prescribe an antibiotic until blood testing confirmed that the patient had Lyme disease.

According to Plaintiff's testimony, nothing much happened in the days immediately after he saw Mr. Hamandi, although he did not feel as normal as he usually felt. He used the hydrocortisone cream on the two bites as prescribed by Mr. Hamandi. Then, on May 27, 2000, when Plaintiff had to stand for count, he noticed that his eyes were fuzzy. He went back to sleep after count, and when he got back up, his vision still was blurry. Later in the day, Plaintiff went to work at the powerhouse and then, at end of his work shift, Plaintiff went to a correction officer at the satellite camp and reported that he had a vision problem. The officer called to the main prison

and talked to a physician's assistant. Plaintiff was told to report to sick call the next morning, on May 28, 2000.

On May 28, 2000, Plaintiff reported to sick call. On May 29, 2000, Plaintiff was taken to Bradford Hospital where the emergency room physician gave Plaintiff prednisone. At first Plaintiff took the prednisone orally. Then the prison gave him a prescription for prednisone eye drops. Ultimately, Plaintiff took 2 ten-day prescriptions of prednisone.

On June 12, 2000, Plaintiff was seen by Dr. Olsen, the Clinical Director at FCI McKean. Defendant's Ex. A, p. 268. A medical note from that date indicates that Dr. Olsen ordered a number of tests, including one for Lyme tites. Id.

Two medical tests which test for the presence of Lyme disease are the Elisa and Western Blot tests. On June 21, 2000, Plaintiff underwent an Elisa test to see if his body was producing Lyme disease antibodies. Defendant's Ex. C2. The test results were 1.56, which is a positive reading. A positive reading is any number above 1.19. Because the Elisa test was positive, on June 21, 2000, Plaintiff then underwent a Western Blot test. Id. Plaintiff's Western Blot test was negative. To have a positive IgM Western Blot, a person has to have 2 of the following 3 bands: 23, 39 or 41. Id. To be have a positive IgG Western Blot, a person has to have 5 of the following 10 Borrelia-specific bands: 18, 23, 28, 30, 39, 41, 45, 58, 66 and 93. Id. Plaintiff did not have any of these bands. Id.

Plaintiff testified that throughout this time period, Plaintiff did not know what was wrong with him and he had no reason to know that he had Lyme disease.

In October 2000, Plaintiff had a sinus infection. The prison gave him a prescription for an antibiotic, Bactrim. Plaintiff took the medicine as ordered.

Up until November, 2000, Plaintiff was only having vision problems in his left eye. In November 2000, however, Plaintiff began to have vision problems in his right eye as well. By December, 2000, his vision in his right had worsened considerably.

On December 7, 2000, Plaintiff had a MRI of his brain done. The radiologist concluded that the test results suggest "demyelinating disease possibly due to multiple sclerosis. Metastatic disease or an infectious process would seem less likely. Clinical correlation is necessary." Defendant's Exhibit L1.

In January 2001, Plaintiff had another sinus infection. The prison gave Plaintiff another antibiotic, this time amoxicillin. Again, he took the medicine as prescribed.

By January 23, 2001, Plaintiff had been transferred from FCI McKean to FCI Loretto. In a treatment note from FCI Loretto dated January 23, 2001, under the subjective section of the note, it was noted that Plaintiff reported that he had had a suspected insect bite on his right lower leg on May 15, 2000, and that he did get a red, swollen rash on right lower leg which was very itchy, but he did not remember a "target " appearing rash or central clearing as in a classic ECM rash. Defendant's Ex. A, p. 238-239. The note further stated that Plaintiff reported that the rash lasted "several" weeks and that he denied ever having any fever, chills, joint pain, swollen glands, fatigue, or weakness. Id. Finally, the note stated that Plaintiff did not recall if it was a "spider" or tick that bit him because he did not see the insect. Id.

On January 25, 2001, Plaintiff underwent a second round of Elisa and Western Blot tests. Defense Ex. C2. Again, Plaintiff's Elisa test was positive and his Western Blot test was negative. Id. By the time Plaintiff underwent this second round of tests, Plaintiff had been treated with antibiotics on two separate occasions.

In early February 2001, Plaintiff was given dioxycylin by prison personnel. Dioxycylin is an antibiotic given to treat Lyme disease. Plaintiff was told by the prison's pharmacist that if he had Lyme disease, the medicine would cure him.

Plaintiff was again seen by the medical staff at FCI Loretto on February 12, 2001. Defendant's Exhibit A, p. 235. In a medical note from that date, it was observed that Plaintiff was unsteady at first, but did not fall. Id.

Plaintiff was again seen by the medical staff at FCI Loretto on Feb 28, 2001. Defendant's Ex. A, p. 231. In a treatment note from that date, Plaintiff denied having fever/chills, headaches, chest pain, dyspnea, or joint pain. Id. It was also noted under the assessment section of the note, that optic neuritis was suspected due to MS (multiple sclerosis). Defendant's Ex. A, p. 228. The treatment note also states that Plaintiff refused the suggested medical care, which was to transfer to a "MRC" when a bed became available. Id. Finally, the note states that Plaintiff stated that people his brother had talked to think that Plaintiff's problems may be related to Lyme's disease. Id.

Plaintiff was seen by the medical staff at FMC Rochester on April 24, 2001. Defendant's Ex. A, p. 381. A medical note from that date states that Plaintiff was being seen by physical therapy to see what could be done to maintain Plaintiff's strength and coordination and to evaluate whether or not he should be using a wheelchair or crutches for long periods of movement. Id. The treatment note also stated that Plaintiff was still holding onto the possibility of Lyme's Disease rather than Multiple Sclerosis and that Plaintiff requested that he have some sort of "PCR" test. Id.

Plaintiff was seen at the Mayo Clinic Infectious Disease Department on April 30, 2001. Defendant's Ex. A, p. 381. A medical note from this date indicates that Plaintiff was being evaluated for possible CNS/opthamalic Lyme disease. Defendant's Ex. A, p. 366. The note also

states that Plaintiff described his two bites as "two lesions about 1 cm in diameter that were pale in color and markedly pruritic." Id.

On May 7, 2001, Plaintiff underwent a Borrelia burgoferi PCR test at the Mayo Clinic. Defendant's Ex. D1. The results of the tests were negative. Id.

On May 10, 2001, Plaintiff underwent a Lyme Disease Serology test at the Mayo Clinic. Id. The result was "nonreactive." Id.

Plaintiff was seen by the medical staff at FMC Rochester on May 16, 2001. Defendant's Ex. A. p. 379. The medical note dated May 21, 2001 states that on May 16, 2001, Plaintiff was counseled for 45 minutes on a report on Plaintiff's spinal fluid that presented strong evidence for the diagnosis of multiple sclerosis. The note further stated the report showed an increased myelin synthesis rate, a massive increase in the myelin breakdown products, an elevated protein, and that the PCR for Lyme's disease was completely negative in the spinal fluid. Id. This note also discusses that Plaintiff is still hesitant to accept the diagnosis of multiple sclerosis, that a lot of his hesitancy was influenced by his family, who refused to accept the Multiple Sclerosis diagnosis as well, and are waiting for him to be released so that they can take him to additional specialists, hoping for a different diagnosis. Id.

On May 25, 2001, a second MRI was taken of Plaintiff's brain at the Mayo Clinic. Defendant's Exhibit, L2. The findings from the MRI were "all compatible with demyelinating process, most likely MS." Defendant's Ex. L2.

Plaintiff testified that from February, 2001 until September, 2001, when Plaintiff was released from prison, Plaintiff consistently was told by the doctors who saw him that he had Multiple Sclerosis ("MS"). These doctors also told Plaintiff that if he had had Lyme's disease, that

after he was done taking the antibiotics, it would be cured by the medicine. Plaintiff further testified that by May or June of 2001, he believed that he had Multiple Sclerosis because the doctors told him that if he had had Lyme's disease, the medicine they had given him would have cured the Lyme's disease and he still had the vision problems. He did not think he had Lyme disease. He also thought the prison had done everything it should have done and he never thought that the prison had committed malpractice or otherwise had done anything negative with respect to his health.

Plaintiff was released from federal custody on September 21, 2001. When Plaintiff left prison in September 2001, his brother said we are going to see if we can get you some help. Plaintiff was all for it. If his brother had not stepped in, Plaintiff would not have done anything else; he was resigned to the fact that he had Multiple Sclerosis.

One of the things Plaintiff's brother did to help Plaintiff was to locate Dr. Joseph T. Joseph ("Dr. Joseph"). Plaintiff began treating with Dr. Joseph on September 17, 2001. Plaintiff saw Dr. Joseph at least twenty-four (24) times. Plaintiff was immediately told by Dr. Joseph that he thought it was a real possibility that Plaintiff was suffering from Lyme disease. This diagnosis by Dr. Joseph confused Plaintiff because how could Dr. Joseph make a Lyme disease diagnosis and the prison not make the same diagnosis.

Throughout his treatment with Dr. Joseph, Plaintiff began to feel better, although his eyesight did not improve.

Plaintiff went to see Dr. J. Stephen Shymansky for a neurological evaluation on or about September 19, 2002. Defendant's Ex. K1. After examining Plaintiff, Dr. Shymansky ordered a follow-up Western Blot test as well as an MRI. Id.

Plaintiff underwent a third MRI of his brain on September 24, 2002. Defendant's Ex. K3. The impression was "[a]bnormal due to the presence of at least four areas of abnormal signal in the periventricular white matter. One area was present before, three areas are new. None enhance. Two areas that were on the prior scan are no longer present on this scan." Id.

In a letter dated October 15, 2002, Dr. Shumanksy stated that the results of Plaintiff's MRI were indicative of multiple sclerosis and he thought Plaintiff's positive Elisa test "is an epiphenomenon of his immunologic disease process and this cross reactivity cannot be found with Western Blot." Defendant's Ex. K2. Dr. Shymansky also explained that "[i]n my experience, the ALISA technique has been fraught with numerous false positives especially in the setting of immune-mediated disorders such as multiple sclerosis." Id.

On October 15, 2002, Plaintiff underwent a third Western Blot test, this time ordered by Dr. Shymansky. Defendant's Ex. C3. Plaintiff was positive at the 39 and 41 bands only. Id. The interpretation stated "possibly consistent with early Lyme disease." Id. Of course, this was over two years after Plaintiff alleged he contracted Lyme disease.

A fourth MRI was performed on Plaintiff's brain on or about February 24, 2003. Defendant's Ex. G 5. The impression was "MRI scan of the brain demonstrating multiple ovoid high signal intensities in the periventricular white matter of both hemispheres, which are slightly more prominent in number and degree than the prior study [from September 24, 2002]. No active lesions are present." Id.

A fifth MRI was performed on Plaintiff's brain on March 28, 2006. Defendant's Ex. H 4. The report on the MRI noted that "[g]iven the distribution of white matter lesions, I would favor that they are on the basis of demyelinating plaque related to MS. The patient reportedly has known

Lyme's disease and while it is possible that these white matter changes could be related to Lyme's disease, the distribution pattern is more suggestive of MS." Id. The impression was "[m]ultiple white matter lesions. Predominantly located in the periventricular white matter. Some of these lesions appear to be involving the corpus coallosum and a large lesion is seen in the right cerebellar peduncle. While these white matter lesions are nonspecific, the distribution pattern is most suggestive of demyelinating plaque related to MS. See above." Id.

Plaintiff underwent a lumbar puncture test on May 23, 2006, the results of which are contained in a report dated May 30, 2006. Defendant's Ex. H5. The results were negative for Lyme disease.

To this day Plaintiff still has some serious health problems. He is not totally blind, but he cannot read or use a computer monitor. He has a severe problem with depth perception the result of which is that he stumbles, trips, and falls occasionally. Plaintiff also cannot drive. His Optic Neuritis is expected to be permanent.

Plaintiff currently feels pretty well. He stays active, exercising daily. Plaintiff is not treating actively with any doctor.

B. Testimony by Medical Experts.

1. Joseph T. Joseph, M.D.

Dr. Joseph T. Joseph testified on behalf of Plaintiff. Dr. Joseph's practice is in internal medicine. Approximately twenty percent (20%) of Dr. Joseph's time is spent seeing Lyme disease patients. Dr. Joseph follows approximately 50-70 Lyme disease patients at a time. He has seen Lyme disease patients since 1987.

Dr. Joseph testified that McKean County, where FCI McKean is located, is a high risk county for Lyme disease. He also explained that Lyme disease season for ticks is whenever there is warm weather above 40 degrees. In Dr. Joseph's opinion, April, the month Plaintiff alleges he was bit by a tick, can be lyme season if the weather is warm enough.

Dr. Joseph testified to the following about Lyme disease. First, with respect to Lyme disease patients, sixty-eight percent (68%) of these patients show up with a rash and one hundred percent (100%) have some flu-like symptoms, with the flu-like symptoms appearing before the rash appears. Additionally, an Erythema Migranes ("EM") rash starts as a bite and then becomes circular. An EM rash can present in many different forms. A medical professional can be fooled by the look of the rash. The time period between the tick biting and the rash showing up is 3 to 30 days.

In Dr. Joseph's opinion, if a patient has an EM rash, the examining doctor should treat it. Moreover, if a patient has an atypical rash, then the medical professional should test using an Elisa or Western Blot test. In other words, it is Dr. Joseph's opinion that if one can not make a clinical diagnosis of Lyme disease, then tests should be used.

Dr. Joseph testified that with both the Elisa and Western Blot tests, you either test positive or test negative. Dr. Joseph also explained that the Center for Disease Control does not have a set criteria for the diagnosis of Lyme disease. Rather, the diagnosis of Lyme disease is a clinical diagnosis.

Dr. Joseph testified that if a patient came to him and said I have a bug bite that I think was a spider bite and the rash is now gone, Dr. Joseph may or may not treat with antibiotics. Whether or not he would treat the patient with antibiotics depends on what the person was doing at the time he

was bitten.

With respect to his treatment of Plaintiff, Dr. Joseph testified that he first saw Plaintiff on December 19, 2001. Plaintiff presented to Dr. Joseph complaining of some blindness, joint pain, and fatigue. Plaintiff explained to Dr. Joseph that on May 15, 2000, he had been bitten by a tick in two (2) places, that by May 28, 2000, he was blind in one eye and by November, 2000, he was blind in both eyes.

Dr. Joseph testified that if a patient presents with a history of a tick bite and a rash, then the correct diagnosis is Lyme disease. A blood test is helpful to Dr. Joseph, but it is not essential to diagnosing Lyme's Disease. Dr. Joseph also stated that the appearance of two (2) separate lesions is not indicative of a spider bite in that spiders bite in trails; they bite and bite and bite. Dr. Joseph says every rash is suspect.

Dr. Joseph discussed Plaintiff's lab results. With respect to the June 21, 2000 report that showed Plaintiff's first Western Blot test was negative, Dr. Joseph opined that this test was a false negative reading because Plaintiff had been given large doses of prednisone from the very beginning due to his eye problems. Dr. Joseph further opined that Plaintiff's steroid use is very significant because steroids are designed to suppress antibodies. In Dr. Joseph's opinion, while the giving of prednisone could help Plaintiff's Optic Neuritis, it could have a negative effect on a Lyme disease diagnosis because the drug suppresses the antibodies.

Dr. Joseph also testified about the January 25, 2001, Lyme disease testing. With respect to Plaintiff testing negative for the Western Blot test, Dr. Joseph found it significant that Plaintiff had been given Batrim DS (double strength), an antibiotic, in October 2000, as well as amoxicillin in early January 2001. Dr. Joseph explained that these antibiotics can give a false negative reading.

Dr. Joseph also noted that there were some IgG numbers on the Western Blot test results that showed Plaintiff was still trying to produce antibodies.

Dr. Joseph further testified that it was his opinion that the PCR test done in May, 2001 was not a valid test because of all the antibiotics Plaintiff had taken by that time.

Dr. Joseph stated that if he had seen only the Plaintiff's medical records, including the bug bite, and the positive Elisa tests, he would have diagnosed the possibility of Lyme disease.

Dr. Joseph acknowledged that there is a close connection and overlap between Lyme disease and Multiple Sclerosis and stated that he took this connection into consideration when he treated Plaintiff.

Dr. Joseph wrote multiple expert reports on Plaintiff's condition and its cause. One of Dr. Joseph's reports uses the term bulls-eye; he usually writes what the patient tells him, so more than likely, Plaintiff used the term bulls-eye. Dr. Joseph also acknowledged that there were differences between Mr. Hamandi's description of the rash and Plaintiff's description of the rash to Dr. Joseph. Dr. Joseph acknowledged that if Plaintiff's description of the rash was wrong, then Dr. Joseph's opinion could be wrong.

Ultimately, Dr. Joseph testified that he can say within a reasonable degree of medical certainly that Plaintiff had Lyme disease, that the Lyme disease was the cause of Plaintiff's Optic Neuritis, and that Plaintiff's Optic Neuritis was caused by the failure of a timely Lyme disease diagnosis. Dr. Joseph further opined that negligent medical treatment was a substantial contributing factor in Plaintiff getting Optic Neuritis. Dr. Joseph also stated that Plaintiff's Lyme disease may have triggered the Multiple Sclerosis.

2. Anthony DiMarco, M.D.

Dr. Anthony DiMarco, MD, also testified on behalf of Plaintiff. Dr. DiMarco is an osteopath and is board certified in family medicine. Dr. DiMarco is not an infectious disease specialist.

Dr. DiMarco has a full service family practice which is in located in western Delaware County, Pennsylvania. Dr. DiMarco testified that all of Pennsylvania has a high endemic rate for Lyme disease. Dr. DiMarco has an increasing amount of patients with Lyme disease. He has treated about 500 patients with Lyme disease. Dr. DiMarco explained that Optic Neuritis can be a symptom of Lyme disease, with less than ten percent (10%) of the people with Lyme disease having Optic Neuritis.

Dr. DiMarco testified that there are several ways to diagnose Lyme disease. First, some patients have a clinical presentation; of those patients with a clinical presentation, two-thirds (2/3) of them had negative lab tests. But, Dr. DiMarco testified, a medical professional still needs to look to the clinical presentation and rule out other medical problems. Dr. DiMarco will look for clinical headaches, disinterest, and fatigue. He will rule out anemia, depression, iron deficiency, and thyroid disease. Dr. DiMarco explained that he will make a diagnosis of Lyme disease once he rules out these other problems. Dr. DiMarco explained that Lyme disease is called "the great imitator" because many of the symptoms of Lyme disease could be other medical problems.

In terms of treating a patient whom he thought might have Lyme disease, Dr. DiMarco would order a blood test, but in the meantime, he would start the antibiotics right away and not wait for the blood test results.

Dr. DiMarco has seen tick bites that look like a red spot. He explained that where the bite is located on the red spot is significant; a tick bite will be in the center whereas a spider bite will be off

to one side. Dr. DiMarco also will take into account the patient's other symptoms. If Dr. DiMarco sees a bite in the middle of red spot, he will treat it as a tick bite until it is proven otherwise.

Dr. DiMarco examined Plaintiff's prison medical records. In Dr. DiMarco's opinion, Mr. Hamandi's note describes EM lyme rashes. Dr. DiMarco explained that an "EM" is a red erthyemic area, i.e. there is a skin colored area left in the middle and a red outer circle. Dr. DiMarco explained that when medical professionals use that term, they are referring to a lyme rash. Dr. DiMarco would describe a spider bite as an infectious lesion, not an erythemic lesion.

Dr. DiMarco opined that Mr. Hamandi should have prescribed antibiotics to Plaintiff on May 15, 2000 even if Mr. Hamandi thought the bites were spider. If Mr. Hamandi had done so, Dr. DiMarco explained, then by "benign neglect" he would have treated Plaintiff's Lyme disease.

Dr. DiMarco testified that even if Plaintiff's rash was gone and he had no other symptoms, based upon the description of the rash given by Mr. Hamandi, Dr. DiMarco would have diagnosed Plaintiff with Lyme disease and treated Plaintiff for Lyme disease.

With respect to Plaintiff presenting only with a rash, Dr. DiMarco explained that many times a rash will be the first symptom a patient gets with Lyme disease. Dr. DiMarco did not agree with Dr. Joseph that Plaintiff would have had some of the "classic" symptoms; "everyone is different." Dr. DiMarco also explained that a Lyme disease rash can be a variation from the classic bulls eye rash, but not usually.

Dr. DiMarco testified that the rash Plaintiff is now describing is a classic bulls eye rash. Dr. DiMarco also testified that it is not inconsistent for a patient to change his description of a rash.

In Dr. DiMarco's opinion, Mr. Hamandi breached the applicable standard of care with respect to Plaintiff in that he misdiagnosed Plaintiff as having a spider bite, and did not treat the

misdiagnosis correctly. Dr. DiMarco further opined that Plaintiff had Lyme disease and his Lyme disease was a substantial contributing factor to Plaintiff contracting Optic Neuritis.

With respect to Plaintiff's use of steroids, Dr. DiMarco explained that prescribing Plaintiff a double dose of steroids for the Optic Neuritis was okay. The medical professionals, however, also should have incorporated the use of antibiotics because, by not doing so, they were bolstering the cause of the Optic Neuritis, i.e. the Lyme disease, in that Plaintiff's immune system was not working as well as it should have been because steroids decrease the body's immune response to infection.

With respect to the results of Plaintiff's first Elisa and Western Blot tests, Dr. DiMarco testified that at best an Elisa test is only 80% accurate. Therefore, Dr. DiMarco opined, once you take into account Plaintiff's two (2) courses of steroids, one cannot accurately test a patient's immune system through a test such as an Elisa test.

With respect to Plaintiff's January 2001 Western Blot test, the results of which were negative, Dr. DiMarco opined that this test was a misleading false negative due to Plaintiff having taken the two courses of antibiotics, first in October 2000 (Bactrim DS) and again in January 2001 (amoxycillin), as well as Plaintiff earlier having used the steroids. Dr. DiMarco stated that he would have been amazed if the test had been positive since both medications help with Lyme Disease.

Dr. DiMarco also explained that the two (2) courses of antibiotics taken by Plaintiff between October 2000 and January 2001 could have helped Plaintiff with any symptoms of headaches, malaise, joint pain, etc.

With respect to the similarities and differences between Multiple Sclerosis and Lyme disease, Dr. DiMarco explained that many of symptoms of Lyme disease overlap with symptoms of Multiple Sclerosis and that it can be difficult to differentiate between Lyme disease and Multiple

Sclerosis, even if you don't think the patient has Lyme disease.

Dr. DiMarco further testified that if Plaintiff has Multiple Sclerosis, Plaintiff's Lyme disease and the mistreatment of Plaintiff's Lyme disease could have caused the Multiple Sclerosis because any severe trauma can cause inactive Multiple Sclerosis to become active. But ultimately, Dr. DiMarco does not opine that Plaintiff has Multiple Sclerosis.

All of Dr. DiMarco's opinions were expressed to a reasonable degree of osteopathic certainty.

Dr. DiMarco agreed that Plaintiff was given antibiotics for Lyme's Disease in February 2001 because some medical practitioner incorrectly thought that the positive Elisa test was not followed up on. In fact, the positive Elisa test was followed up by a Western Blot test and that Western Blot test was negative.

With respect to the June 21, 2000 Elisa test, Dr. DiMarco explained that the number on the Elisa test has nothing to do with the severity of a person's Lyme's Disease. Rather, the number tells the medical professional to lean towards Lyme's Disease. The medical professional then has to look for clinical symptoms.

With respect to the fact that Plaintiff was given Prednisone, a steroid, three (3) weeks before the June 21, 2000 Elisa test was administered, Dr. DiMarco stated that there are studies that show that steroid use decreases antibodies. Dr. DiMarco discussed three medical articles that support his position that steroids such as prednisone can cause false negative results because steroids suppress antibodies. Dr. DiMarco also explained that it takes up to six (6) weeks to get a positive Lyme's Disease test, i.e. to get a positive Elisa test.

Dr. DiMarco also discussed two medical articles that support his position that antibiotic use can cause false negative results because antibiotics suppress antibodies. Dr. DiMarco also stated that the results of PCR (lumbar puncture) tests also are affected by antibiotic use.

With respect to the results of the June 21, 2000 Western Blot test, it was Dr. DiMarco's position that the prednisone taken by Plaintiff could have decreased the antibodies Plaintiff was making such that the Western Blot test would not give a positive result for Lyme's Disease. Dr. DiMarco admitted that the Western Blot test results from Plaintiff showed Plaintiff not to be producing any Lyme's Disease antibodies, which is unusual even for someone who does not have Lyme's Disease.

Ultimately, with respect to the two June 21, 2000 test results, Dr. DiMarco thought the positive Elisa number was a lyme antibody-that it was antibodies built up before Plaintiff began the prednisone. Then, the first Western blot was negative because the prednisone prevented new antibodies from forming.

Dr. DiMarco also explained with respect to the Western Blot test, that if a patient has a positive IgM, then the medical professional knows that the Lyme disease is in early stages. But this positive IgM will go away after a few weeks. Thereafter, if a patient has a positive IgG, then the patient is in the later stages of the disease. So if a patient has had Lyme disease for several weeks, the IgM results will be negative.

With respect to the time line of Plaintiff's illness, Dr. DiMarco explained that "early on" would be two (2) weeks from May 15th, 2000 or early June 2000.

Dr. DiMarco also discussed Plaintiff's second set of Elisa/Western Blot tests on January 25, 2001. With respect to the results from this Elisa test being 1.9, such that Plaintiff was producing

antibodies, Dr. DiMarco explained that these antibodies could have been there from before Plaintiff contracted Lyme disease because once antibodies are present, they do not go away.

Dr. DiMarco's bottom line was not to put too much credence into the Elisa and Western Blot tests. They are just a confirmatory test, but don't rely on it.

Dr. DiMarco also discussed the results of Plaintiff's December 7, 2000 MRI, where areas of spots in the white matter of Plaintiff's brain were observed. Dr. DiMarco stated that this could be Lyme disease. Notably, this opinion is in contrast to the opinion of the radiologist reading the tests who had concluded that the test results suggest "demyelinating disease possibly due to multiple sclerosis. Metastatic disease or an infectious process would seem less likely. Clinical correlation is necessary." Dr. DiMarco explained that if he has a differing opinion from an expert, he sticks with his own opinion.

3. Dr. Gary Wormser.

a. Testimony via deposition.

The Government introduced Dr. Gary Wormser's January 9, 2007 video deposition transcript into the record as evidence in support of their case. Additionally, Dr. Wormer testified at the non-jury trial via telephone.

Dr. Wormser testified to the following at his deposition. He is board certified in internal medicine and infectious diseases. He is a member of the Infectious Disease Society of America ("IDSA"). He heads up the IDSA's panel on developing the infectious disease guidelines for the treatment and diagnosis of Lyme disease and related tick-borne diseases. He is also an ad hoc spokes person for the IDSA on the subject of Lyme disease.

Dr. Wormser has published 2 or 3 articles on the eye manifestations of Lyme disease.

Dr. Wormser has treated Lyme disease patients since 1981. Since then he has evaluated thousands of patients for Lyme disease. Of these thousands, he has only treated one patient for eye manifestations associated with Lyme disease. This is because eye manifestations associated with Lyme disease are extraordinarily rare.

Dr. Wormser explained that Lyme disease is a bacterial infection. It's the type of bacteria that we call spirochete. It's transmitted by a specific species of ticks. An infected tick will bite a person and innoculate the organism into the skin. At the site of the bite, an infection will develop - an erythema migrans ("EM"). Then from that original site, the bacteria can spread through the blood stream to many other sites in the body where it can then initiate secondary areas of infection, secondary areas involving the nervous system, the joints and the heart most commonly.

Dr. Wormser further explained that the most common symptom of Lyme disease is a characteristic rash at the site of the bite and that typically, an EM rash appears about 7 to 14 days after the tick falls off/is removed. In addition to the EM rash, about seventy percent (70%) of the Lyme disease patients Dr. Wormser sees also have flu-like symptoms, including pains in their joints, but not arthritis, aches and pains in the muscles and joints, neck pains, headaches, and sometimes fever.

Dr. Wormser further explained that the EM rash typically is at least 2 inches in diameter, red in some component, may have some clearing, and is not very painful or itchy or bothersome for the patient. Dr. Wormser also explained that untreated, the rash will disappear on its own in a median time of 4 weeks.

Dr. Wormser explained that about 80 percent (80%) of Lyme disease patients resolve their EM rash without antibiotic treatment. Of those patients who resolve without antibiotic treatment, at

least 60 percent (60%) will develop some sort of objective finding subsequently, most commonly swelling of a joint, particularly of the knee.

Dr. Wormser explained that Optic Neuritis is not a symptom commonly associated with Lyme disease. To the contrary, it is a very rare, extraordinarily rare symptom of Lyme disease.

Dr. Wormser absolutely did not believe that Plaintiff's Optic Neuritis was caused by Lyme disease. Dr. Wormser reached this conclusion because he found that there was nothing about the Plaintiff's case that suggests Lyme disease to him. Dr. Wormser further explained that Plaintiff consistently had negative serologic, antibody, testing for Lyme disease, which in and of itself would rule Lyme disease out.

Concerning how to diagnose Lyme disease, Dr. Wormser explained that a history of a rash would motivate him to do a Lyme test and then he would rely on the results of the Lyme testing. Dr. Wormser also explained that if you have a target rash, it's noteworthy, but if you do not have a target rash, that does not mean you do not have Lyme disease.

Dr. Wormser explained that the rashes described in Plaintiff's prison records was far from a typical type of Lyme rash in that they were described as very small and very itchy. Dr. Wormser explained that while EM rashes can be somewhat itchy, typically they are over two inches in size.

Dr. Wormser explained that infectious disease specialists test for Lyme disease by doing antibody testing. They are looking for evidence of antibody formation, antibodies developing in the body to combat the bacteria that causes Lyme disease. This test is done by two different techniques. The first stage test is the Elisa test. The second stage test is the Western Blot test. Dr. Wormser testified that the use of the Elisa and Western Blot tests to test for Lyme disease is an accepted method of testing for Lyme disease in the main stream medical community.

Concerning the Elisa test, Dr. Wormer testified that everyone has some antibodies that would react with the Lyme bacteria, so a cutoff point is developed and anything above the cutoff is considered a positive reaction. But, Dr. Wormser explained, the Elisa test is too inaccurate in and of itself to pinpoint a diagnosis and so, if a patient has a positive Elisa test, then it is necessary to go to a second stage to see what exactly was being reacted to and conduct a Western Blot test. With the Western Blot test, because so many people in the general population have reactivity to parts of the bacteria that causes Lyme disease, again there is a certain cutoff. The patient has to have a certain number of bands and these reactive bands have to be of a specific type in order for the patient to be considered positive for Lyme disease.

Concerning the progression of Lyme disease, Dr. Wormser explained that within 2 to 4 weeks of being exposed to Lyme Disease, a patient will test positive in a Western Blot test.

Dr. Wormser explained that he had reviewed all of Plaintiff's Bureau of Prisons medical records, all of the results from Plaintiff's Elisa and Western Blot tests, and all of Plaintiff's MRIS and MRI reports. With respect to the results of Plaintiff's first Elisa test, Dr. Wormser explained that these results were a low positive. Dr. Wormser would have expected a much higher Elisa reaction if, in fact, Plaintiff had had an EM rash 5 or 6 weeks before and had gone untreated.

With respect to the results from Plaintiff's Western Blot test, Dr. Wormser first explained that to be positive for an IgG Western Blot, a patient has to have five of the bands tested be reactive and to be positive for an IgM Western Blot, a patient has to have 2 of 3 specific bands be reactive. Dr. Wormser then explained that Plaintiff had no bands reactive on his first set of Western Blot tests. Dr. Wormser further explained that based upon his experience, where as alleged here, patients have multiple Lyme rashes, they will have high-level reactivity results on the Western Blot test.

Additionally, Dr. Wormser explained that because approximately five (5) weeks had passed since Plaintiff went to the infirmary, by June 21, 2000, Plaintiff should have had a couple of bands be reactive, and that zero bands is unusual even in the general population who do not have Lyme disease.

With respect to the Elisa test completed on Plaintiff on January 25, 2001, Dr. Wormser explained that while Plaintiff's Elisa test was positive (Plaintiff's number was 1.29 and the cut-off for a positive is 1.11), the reactivity was even lower than the prior Elisa test in June 2000. This extremely low-level reactivity was significant to Dr. Wormser because in Plaintiff's situation, the alleged Lyme disease had gone untreated, and typically, in such a situation, there would be sky-high levels.

With respect to Plaintiff's second, January 25, 2001, Western Blot test, Dr. Wormser explained that only the "41" band reacted. This was significant, Dr. Wormser explained, because since "41" is the band that is present in about 50 percent of the general population, the "41" band reacting in and of itself means nothing. Thus, Dr. Wormser concluded, Plaintiff had a completely negative Western Blot test.

Dr. Wormser further explained that if Plaintiff had Lyme disease, he would expect Plaintiff, by January 25, 2001, to have a high-level Elisa reactivity as well as a positive reaction on the Western Blot test. Because Plaintiff had only a low-level Elisa reactivity and a completely negative Western Blot test, Dr. Wormser concluded that Plaintiff did not have Lyme disease any time up to January 25, 2001.

With respect to Plaintiff's October 15, 2002 blood test done at the Mayo Clinic, Dr. Wormser explained that an IgG Western Blot and an IVM/IFA was tested. Mr. Wormser further

explained that IFA stands for immunofluorescence antibody test and that it is a test that was used before the Elisa test came out and basically is a similar test to the Elisa test. Here, there was a positive IVM/IFA; that means the same thing as a positive Elisa. The Western Blot test was positive on two (2) bands, the 41 band and the 39 band. But, Dr. Wormser explained, two (2) bands do not meet the criteria for positivity.

Dr. Wormser stated that the use of the Elisa and Western Blots tests by the Bureau of Prisons was within the standard of care for testing for Lyme disease at the time Plaintiff presented with the two (2) rashes.

Dr. Wormser concluded that Plaintiff absolutely did not have Lyme disease and that he would not have treated Plaintiff for Lyme disease. "The rashes don't suggest Lyme disease. The serologic testing is completely against Lyme disease. The type of optic neuritis he apparently has is against Lyme disease. He comes from a low risk area of Pennsylvania for Lyme disease. It's early in the year for erythema migrans in May. We hardly ever see erythema migrans in May. He has sequential episodes of optic neuritis. I mean, that would be extraordinarily too incredible to even believe it could be due to Lyme disease, and he has a perfectly reasonable alternative for all of this, that is MS. He has CFS findings that are consistent with MS. He has clinical course that's consistent with MS. He has the type of optic neuritis that's consistent with MS. And he doesn't have any evidence of antibody formation or positive testing for Lyme disease." Wormser deposition, pp. 32-33.

Dr. Wormser further explained that if you have a patient that has some form of Lyme disease and has seropositivity and he is treated appropriately with antibiotics, then it is fairly common for that patient to lose his seropositivity over time. With respect to Plaintiff, Dr. Wormser explained

that Plaintiff had plenty of testing before he received antibiotic treatment. If he had been treated right away, maybe his seronegativity could have been rationalized. But he was not treated in the early phase and therefore, he had plenty of time to make an antibody response and did not do so.

Dr. Wormser concluded with a reasonable degree of medical certainty that Mr. Fix did not have Lyme disease and never had Lyme disease. Dr. Wormser also concluded that Plaintiff's Optic Neuritis is in no way related to Lyme disease.

All of the opinions made by Dr. Wormser in his January 9, 2007 deposition were made within a reasonable degree of medical certainty.

b. Testimony at trial via telephone.

Dr. Wormser testified to the following when he testified by telephone during the trial itself. Dr. Wormser explained that all of Plaintiff's Western Blot tests were negative. Dr. Wormser does not think Plaintiff has Lyme's disease and he does not think Plaintiff's Optic Neuritis is caused by Lyme's disease. Indeed, Dr. Wormser stated that it is inconceivable that Plaintiff could have Lyme disease. This opinion takes into consideration that Plaintiff used various steroids and had multiple treatments of antibiotics.

Dr. Wormser opined that the opinions of Drs. DiMarco and Joseph that the Elisa and Western Blot tests were false negative are completely wrong. Contrary to the opinions of Drs. Joseph and DiMarco, Dr. Wormser stated that steroid use does not significantly affect antibody responses, and certainly not in the dosages that Plaintiff received.

With respect to Plaintiff being given Prednisone two (2) weeks after the rash allegedly appeared, Dr. Wormser explained that if Plaintiff had Lyme disease, he should have had antibodies built up already and therefore, he should have had a positive or close to positive neurolicacal test.

Dr. Wormser further explained that Plaintiff would have kept making antibodies after Plaintiff was done with the steroids. Therefore, if Plaintiff had Lyme disease, he would started making antibodies again after the steroids were stopped. The steroids would not have irradiated any antibodies.

Dr. Wormser further stated that Plaintiff had plenty of time to make antibodies before the first Western Blot test and that the vast majority of people with Lyme disease will be positive at that time and if not positive, close to positive.

Dr. Wormser also explained that Bactrim, an antibiotic given to Plaintiff in October 2000, is not an antibiotic that is effective against Lyme disease.

Dr. Wormser also testified that by five (5) months after Plaintiff's Lyme's disease allegedly began, no matter how many antibiotics Plaintiff had taken or which kinds he had taken, Plaintiff still should have had sky-high antibodies.

With respect to a Massachusetts General Hospital article which stated that the use of steroids can cause a false negative result, Dr. Wormser explained that one has to look at the dosage of the steroid. Dr. Wormser discussed how Plaintiff had gotten a topical steroid on May 15, 2000 and thereafter, took four (4) prescriptions for steroids: two (2) topical and two (2) oral, all right before the first Elisa and Western Blot tests. Dr. Wormser explained that Plaintiff's topical steroid use was marginal/minimal and therefore, would not have affected the results of the Western Blot test.

Dr. Wormser's bottom line was that if you have Lyme disease, you cannot have zero (0) bands on the Western Blot test, as did Plaintiff with respect to his first Western Blot test.

Dr. Wormser stated that he believes that one course of antibiotics, generally between two (2) and four (4) weeks, is enough to cure Lyme disease.

By the time Plaintiff took the second Western Blot test in January 2001, Plaintiff had taken one course of ten (10) straight days of amoxicillin. Dr. Wormser explained that Amoxicillin is a preferred drug for treatment of Lyme disease. Even with this Amoxicillin course, Dr. Wormser stated, Plaintiff still should have had the antibodies (or some of them) left at the time of the second test. Dr. Wormser explained that only twenty percent (2%) of patients with Lyme disease who were treated while they still had the rash will go to 0 antibodies within 1 year.

Dr. Wormser noted that on June 21, 2000, Plaintiff had no IGG bands, and in 2002, Plaintiff had one (1) 41 IGG band. Dr. Wormser explained that a result of zero (0) bands on a Western Blot test is unusual. Dr. Wormser further explained that this change of one (1) band is insignificant and that is why a patient has to have five (5) bands to for there to be a diagnosis of Lyme disease.

Finally, Dr. Wormser testified that based on Mr. Hamandi's description of Plaintiff's rash in the record, he did not think Plaintiff had an Erythema Migrans.

4. Dr. Mitchell S. Felder, M.D.

The deposition for trial of Dr. Mitchell S. Felder, M.D. was also introduced by the Government in support of its defense. Dr. Felder was a physician whom Dr. Joseph consulted with regarding Plaintiff's treatment.

About fifteen percent (15%) of the patients Dr. Felder treats have multiple sclerosis ("MS") and three to five percent (3-5 %) of his patients suffer from Lyme disease..

Dr. Felder explained that Lyme disease can cause quite a bit of symptomatology that can mimic MS in many cases.

Dr. Felder explained that one of the possible neurological manifestations of Lyme disease is optic neuritis. He agreed that optic neuritis is an unusual symptom of Lyme disease. He further

explained that Optic Neuritis also can be caused by MS.

Dr. Felder, who is board certified in neurology, saw Plaintiff in his office on March 9, 2006. Upon examining Plaintiff on March 9, 2006, Dr. Felder noted that Plaintiff had 20/400 vision and a moderately poor tandem gait. Dr. Felder's diagnosis was rule out Lyme disease as mostly diagnosis but also rule out multiple sclerosis. Based on Plaintiff's self-described history of a bulls-eye rash, headache, stiff neck and the positive ELISA test result of 1.56, Dr. Felder opined it was more likely Lyme disease.

Dr. Felder originally opined that Plaintiff's optic neuritis was most likely caused by Lyme disease. His opinion was to a reasonable degree of medical certainty. He later explained that his diagnoses were "one, Lyme disease, two, multiple sclerosis, three, possible combination of the above." Felder deposition, p. 47. Ultimately, Dr. Felder stated that he was not sure whether Plaintiff had Lyme disease. "He may have Lyme disease." Id. at 88. "And he may have MS." Id.

Dr. Felder opined that if Plaintiff had Lyme disease, then the treatment he received by the Bureau of Prisons fell below the standard of care for the treatment of Lyme disease. But he also acknowledged that Plaintiff may not have Lyme disease.

Regarding Plaintiff's February 24, 2003 MRI report that read "multiple ovoid high signal intensities in the periventricular white matter of both hemispheres," Dr. Felder explained that theoretically that could be interpreted as Lyme disease.

Dr. Felder acknowledged that the MRI report he ordered stated that "while these white matter lesions are nonspecific, the distribution process is most suggestive of demyelinating plaque related to MS."

Dr. Felder explained that the results of the April 7, 2006 lumbar puncture test that he ordered leaned somewhat towards Ms, but did not rule out Lyme disease.

Plaintiff's counsel asked Dr. Felder to assume that Plaintiff had flu-like symptoms prior to mid-May 2000, that Plaintiff's description of the rash as he stated to Dr. Felder was accurate, that shortly after January 2001, the decision was made to treat Plaintiff with antibiotics specifically for Lyme disease, that Plaintiff has not had an MS attack over the past several years, and that he greatly improved after taking antibiotics. Taking into account all of these assumptions, Dr. Felder opined that these factors even more strongly support his opinion to a reasonable degree of medical certainty that Plaintiff probably has Lyme disease rather than Multiple Sclerosis.

5. Dr. Rock Heyman, MD.

Dr. Rock Heyman was the final witness to testify on behalf of the Government. He is a neurologist and is Chief of the Division of Multiple Sclerosis at UPMC. Dr. Heyman is board certified in neurology and sleep disorders. Dr. Heyman spends most of his time with patient care; he considers himself a clinician. He has about 1200-1500 patients who suffer from Multiple Sclerosis and related disorders per year.

Dr. Heyman explained that Optic Neuritis is one of the most common presentations of Multiple Sclerosis. His opinion is that the Plaintiff's Optic Neuritis is caused by Multiple Sclerosis. This Opinion is based on his review of the Plaintiff's medical records. Dr. Heyman did not examine Plaintiff.

Dr. Heyman explained that "erythema" means redness. With respect to the May 15, 2000 treatment note, Dr. Heyman did not read Mr. Hamandi's note to be a Erythema Migrans. Therefore, Dr. Heyman did not think Mr. Hamandi should have given Plaintiff antibiotics. Dr. Heyman opined

that if a medical professional has just a suspicion of infection, then they should not prescribe antibiotics because it is bad to over-prescribe antibiotics.

Dr. Heyman found the fact that on May 15, 2000, Plaintiff had a cold sore to be significant. He explained that a cold sore is a viral infection. As such, a patient can have a viral infection and then see a flare-up of Multiple Sclerosis.

Dr. Heyman stated that hydrocortisone cream, such as Plaintiff used in May 2000 to treat the insect bites, would not effect Lyme disease tests. In order for there to be any effect, a person would have to sit in a vat of hydrocortisone cream. Dr. Heyman stated that Plaintiff's use of Prednisone also would not have changed the result of the Western Blot test because the dosage of Prednisone taken by Plaintiff was not enough. Plaintiff's use of Bactrim also would not have changed the results of the subsequent Lyme disease test.

Dr. Heyman explained that the fact that Plaintiff's first Elisa test was positive shows that Plaintiff's antibodies were not being suppressed.

With respect to the ordering of a second Western Blot test in January 2001, Dr. Heyman thinks someone misread the first set of results, did not realize that the first Western Blot test had come back negative, and then prescribed antibiotics just to be safe until second Western Blot test results came back.

Dr. Heyman stated that Optic Neuritis is definitely caused by Multiple Sclerosis. Dr. Heyman further stated that all of Plaintiff's neurological symptoms, including the Optic Neuritis, is consistent with a diagnosis of Multiple Sclerosis. Dr. Heyman further explained that it is possible for Optic Neuritis to be caused by Lyme's disease, but it is not one of the top ten (10) reasons. Dr. Heyman also explained that infection is the most common trigger for Multiple Sclerosis and stress is the

second most common trigger for Multiple Sclerosis.

Dr. Heyman discussed that in a February 2, 2001 treatment note, Plaintiff is described as staggering when he walks and having balance problems. Dr. Heyman interprets this as Plaintiff having another Multiple Sclerosis attack (the first two attacks being Plaintiff losing the sight in his left eye in May 2000 and losing the sight in his right eye in November 2000, both due to Optic Neuritis).

Dr. Heyman explained that an April 9, 2001 treatment note described Plaintiff as developing numbness. Dr. Heyman sees this as yet another Multiple Sclerosis attack.

Regarding Plaintiff's first PCR test, the one done at the Mayo Clinic in May 2001, Dr. Heyman explained that the presence of 55 red blood cells in the spinal fluid taken would not affect the test results, but the low volume of spinal fluid taken could affect the results.

Dr. Heyman reads about 20 MRIs a week. He does not rely on radiologists' reading of MRIs.

Dr. Heyman discussed in detail Defendant's Exhibit F, which was a Power Point presentation of Plaintiff's MRIs. Included were Plaintiff's MRIs from December 7, 2000, May 25, 2001, September 24, 2002, and March 28, 2006. Dr. Heyman's summary of all of these MRIs was that one can see the lesions on Plaintiff's brain coming and going. Dr. Heyman explained that this coming and going of lesions is consistent with Multiple Sclerosis because with Multiple Sclerosis, the brain area will remain inflamed for a few weeks and then go away. Dr. Heyman explained that Plaintiff's MRIs consistently show results consistent with Plaintiff having Multiple Sclerosis and that all of Plaintiff's MRIs are classic Multiple Sclerosis MRIs. Additionally, with respect to all of the lesions in Plaintiff's MRIs, Multiple Sclerosis lesions are oval and Plaintiff's lesions are oval.

Dr. Heyman also explained that the MRIs would have shown Lyme disease if it was there and they do not show Plaintiff to have Lyme disease.

With respect to the December 7, 2000 MRI, Dr. Heyman explained that two lesions together show pretty active Multiple Sclerosis.

Dr. Heyman said the result of the second MRI, from May 25, 2001 is a typical MRI for a person with Multiple Sclerosis.

With respect to the test results from the May 30, 2006 lumbar puncture test, Dr. Heyman explained that the results are consistent with Multiple Sclerosis while at same time being negative for Lyme's disease. Dr. Heyman further explained that these test results show that Plaintiff has a disease that is on-going, whereas if Plaintiff had Lyme disease, due to all of the antibiotics Plaintiff had taken by that time, the antibodies would be gone.

Dr. Heyman explained that even without the MRIs, given Plaintiff's medical history, including the Optic Neuritis and the balance issues, he would diagnose Plaintiff with Multiple Sclerosis.

Ultimately, Dr. Heyman opined that Multiple Sclerosis is definitely the cause of the Plaintiff's Optic Neuritis. He also stated that there is no indication Plaintiff ever had Lyme disease. He also opined that Lyme disease did not cause Plaintiff's Multiple Sclerosis.

On cross-examination, Dr. Heyman admitted that if Plaintiff had Lyme disease in May 2000, that could have triggered the Multiple Sclerosis because any infection like Lyme disease could activate the Multiple Sclerosis. Dr. Heyman also agreed that based upon Plaintiff's current description of the rash, if Dr. Heyman had seen the Hamandi record, he'd have ordered an ELISA test done on Plaintiff if Plaintiff had walked into his office with such a rash.

III. Conclusions of Law.

A. Statute of Limitations.

As explained by the Third Circuit court in Miller v. Philadelphia Geriatric Center, 463 F.3d 266 (3rd Cir. 2006): "[u]nder the FTCA, a claim against the United States is barred unless it is presented to the appropriate federal agency 'within two years after such claim accruals'. 28 U.S.C. § 2401(b). The determination of when a claim accrues for the purposes of the FTCA is a question of federal law." Id. at 270, citing, Tyminski v. United States, 481 F.2d 257, 262-63 (3d Cir. 1973). The Miller court further explained that:

> [t]he FTCA is a limited waiver of the sovereign immunity of the United States. The Supreme Court has admonished that the courts should carefully construe the time limitations of the FTCA so as not to extend that limited waiver beyond that which Congress intended. United States v. Kubrick, 444 U.S. 111, 117-18, 100 S.Ct. 352, 356-57, 62 L.Ed.2d 259 (1979). Normally, a tort claim accrues at the time of injury. Gonzalez v. United States, 284 F.3d 281, 288 (1st Cir. 2002). However, in *Kubrick,* the Supreme Court carved out a "discovery rule" exception for FTCA claims involving medical malpractice. *Kubrick*, 444 U.S. at 111, 100 S.C. 352. Such claims, therefore, accrue not at the time of the injury, but rather when a plaintiff knows of both the existence and the cause of his injury. Importantly, however, accrual does not await the point at which a plaintiff also knows that the acts inflicting the injury may constitute medical malpractice." Id. at 122, 100 S.C. 352.

Id. at 270-71.

Defendant has consistently argued throughout this lawsuit that Plaintiff did not timely file his administrative claim and therefore, this Court does not have subject matter jurisdiction over this matter. Specifically, Defendant alleges that Plaintiff knew or should have known prior to May 29, 2001 that his Optic Neuritis was (allegedly) caused by Lyme disease and yet, Plaintiff's administrative claim was not received by Defendant until May 29, 2003. During the trial, in support of its position that Plaintiff's claim was not timely filed, Defendant cited to the following: (1) Plaintiff was tested for Lyme disease in June 2000 and January 2001 and Plaintiff had access to

those records; (2) Plaintiff indicated that on January 3, 2001, he knew the June 2000 Elisa test was positive; (3)on February 28, 2001, when he was told that he had Multiple Sclerosis, Plaintiff stated that he had Lyme disease; and (4) a May 21, 2001 treatment note shows that Plaintiff and his family thought that he had Lyme disease.

The evidence at trial showed that Plaintiff knew of the existence of his injury, the Optic Neuritis, in May of 2000. The critical question is whether Plaintiff knew or should have known prior to May 29, 2001 that the alleged cause of his injury was Lyme disease. Relevant to this question is the following evidence. First, Plaintiff testified at the trial that during the June 2000 time period when he was first being tested for Lyme disease via the Elisa and Western Blot tests, he did not know what was wrong with him and he had no reason to know that he had Lyme disease. Second, in early February 2001, Plaintiff was given dioxycylin, an antibiotic given to treat Lyme disease, by prison personnel; Plaintiff testified that he was told that if he had Lyme disease, the medicine would cure him. Third, a treatment note reflects that on February 28, 2001, Plaintiff was seen by the medical staff at FCI Loretto, that the assessment was that Plaintiff's Optic Neuritis was suspected to be due to Multiple Sclerosis, that Plaintiff refused the suggested medical care, which was to transfer to a "MRC" when a bed became available, and that Plaintiff stated that people his brother had talked to thought that Plaintiff's problems may be related to Lyme's disease. Fourth, a medical note reflects that on April 24, 2001, Plaintiff was seen by the medical staff at FMC Rochester, that Plaintiff was still holding onto the possibility of Lyme's disease rather than Multiple Sclerosis, and that Plaintiff requested that he have some sort of "PCR" test. Fifth, a medical note dated May 21, 2001 shows that Plaintiff was again seen by the medical staff at FMC Rochester on May 16, 2001, that Plaintiff was counseled for 45 minutes on a report on Plaintiff's spinal fluid that

presented strong evidence for the diagnosis of Multiple Sclerosis, that Plaintiff was still hesitant to accept the diagnosis of Multiple Sclerosis, and that a lot of his hesitancy was influenced by his family, who refused to accept the Multiple Sclerosis diagnosis as well, and were waiting for him to be released so that they could take him to additional specialists, hoping for a different diagnosis. Plaintiff also testified at the trial that from February, 2001 until September, 2001, when Plaintiff was released from prison, Plaintiff consistently was told by the doctors who saw him that he had Multiple Sclerosis, and that these doctors also told Plaintiff that if he had had Lyme's disease, that after he was done taking the antibiotics, it would be cured by the medicine. Plaintiff further testified that by May or June of 2001, he believed that he had Multiple Sclerosis because the doctors told him that if he had had Lyme's disease, the medicine they had given him would have cured the Lyme's disease and he still had the vision problems, and that he did not think he had Lyme disease. Finally, Plaintiff did not received a diagnosis of Lyme disease from Dr. Joseph until December 2001.

Clearly Plaintiff did not know that the (alleged) cause of his Optic Neuritis was Lyme disease until he was told of the diagnosis by Dr. Joseph in December 2001. The issue of whether Plaintiff should have known that the (alleged) cause of his Optic Neuritis was Lyme disease is a much closer question. Certainly by February 28 2001, Plaintiff had in his mind that it was possible that the cause of his Optic Neuritis was Lyme disease; this fact is reflected in the February 28, 2001 treatment note from FCI Loretto. Yet, every time Plaintiff questioned Defendant about whether his Optic Neuritis could have been caused by Lyme disease, the Defendant told him no, that the tests showed that his Optic Neuritis was caused not by Lyme disease, but because he had Multiple Sclerosis. Additionally, the Defendant told Plaintiff that if he had had Lyme disease, the dioxycylin Plaintiff took in February 2001 would have cured him of Lyme disease, including correcting his

vision problem, which was not corrected as a result of Plaintiff taking the dioxycylin. Finally, at trial the experts all testified that it is difficult to diagnose Lyme disease.

Defendant wants us to agree that because Plaintiff was being told by his family that his Optic Neuritis might be caused by Lyme disease, that he should have known that his Optic Neuritis was caused by Lyme Disease. This we cannot do. To the contrary, based upon the evidence discussed above, we conclude that Plaintiff neither knew nor should have known any time prior to May 29, 2001, that the (alleged) cause of his Optic Neuritis was Lyme disease. Accordingly, Plaintiff's administrative claim, received by Defendant on May 29, 2003, was timely filed.

B. Substantive Analysis of FTCA claim.

The substantive law applicable in this Federal Torts Claims Act case is very straight forward. As explained by the district court in Berman v. United States, 205 F.Supp.2d 362 (M.D. Pa. 2002):

> The FTCA allows federal prisoners to pursue suits against the United States in an effort to recover for personal injuries sustained during confinement by reason of negligence of government employees. United States v. Muniz, 374 U.S. 150, 150, 83 S.C. 1850, 10 L.Ed.2d 805 (1963); 28 U.S.C.§ 1346(b). The primary purpose of the FTCA is to "remove sovereign immunity of the United States from suits in tort, and with certain specific exceptions, to render the Government liable in tort as a private individual would be under like circumstances." Richards v. United States, 369 U.S. 1, 6, 82 S.C. 585, 7 L.Ed.2d 492 (1962); 28 U.S.C.§ 1346(b). Under the FTCA, "the law of the place where the alleged act or omission occurred is to be applied." Turner v. Miller, 679 F.Supp. 441, 443 (M.D. Pa.1987); 28 U.S.C.§ 1346(b). . . .
>
> The United States Bureau of Prisons has a duty to provide adequate medical care to a prisoner. Yosuf v. United States, 642 F.Supp. 415, 427 (M.D. Pa.1986). In order to succeed on the present claim, plaintiff must show by competent medical evidence that the conduct of the medical personnel treating him fell below the standards of reasonable medical practice under the circumstances and proximately caused his injuries. Lira v. Albert Einstein Medical Center, 384 Pa. Super. 503, 559 A.2d 550, 552 (1989). A physician is liable for failure to exercise ordinary skill, care and diligence which results in injury to the patient. Incollingo v. Ewing, 444 Pa. 263, 299, 282 A.2d 206 (1971). Furthermore, "the plaintiff generally must present an expert who will testify, to a reasonable degree of medical certainty, that the acts of the defendants deviated from the acceptable medical standards, and that the deviation

> constituted a substantial factor in causing the plaintiff's injury." McCabe v. Prison Health Services, 117 F.Supp.2d 443, 456 (E.D.Pa.) (citing Mitzelfelt, 584 A.2d at 892). There is only one exception to the requirement of expert witness testimony in medical malpractice claims: where the matter is " 'so simple, and lack of skill or want of care so obvious, as to be within the range of ordinary experience and comprehension of even nonprofessional persons.'" Id. (quoting Brannan v. Lankenau Hospital, 490 Pa. 588, 417 A.2d 196, 201 (1980)).

Id. at 363-364 (footnote omitted). Further, because all of the conduct giving rise to Plaintiff's FTCA claim occurred at FCI-McKean, a federal facility located in Pennsylvania, Pennsylvania state law must be applied in this case.

> As explained by the parties in their "Joint Stipulation of Both Parties:"
>
> [t]he issue to be decided is whether there was medical negligence. Plaintiff claims that Defendant breached the standard of care by failing to timely diagnose and treat his Lyme Disease. Plaintiff claims that the breach of the standard of care was the proximate cause, or substantial contributing factor of his optic neuritis. In contrast, Defendant argues that there was no failure to diagnose and treat Plaintiff for Lyme Disease because he did not have Lyme Disease and thus there was no breach of the standard of care. Defendant further argues that even if there had been a breach in the standard of care, Plaintiff cannot establish that such a breach was a proximate cause, or substantial contributing factor of his Lyme Disease since the sole cause of Plaintiff's optic neuritis is his Multiple Sclerosis.

Joint Stipulation, p. 2. Thus, in order to prove his case, Plaintiff has to have established by a preponderance of the evidence through expert testimony that: (1) the prevailing standard of medical care accepted by the medical profession with respect to the diagnosis and treatment of Lyme disease; and (2) that the diagnosis and treatment provided Plaintiff by Defendant deviated from and fell below such accepted standards. Titchnell v. United States, 681 F.2d 165, 166 and 169 (3d Cir. 1982). Further, Plaintiff has to have proven by a preponderance of the evidence that it was Defendant's conduct that proximately caused Plaintiff's injury, the Optic Neuritis. Id. at 169.

The first issue which must be addressed in this sad case is whether Plaintiff has proven by a preponderance of the evidence that in May 2000 he had Lyme disease. For if Plaintiff did not have Lyme Disease in May 2000, then Defendant did not breach any standard of care by failing to timely diagnose and treat Plaintiff's Lyme Disease and any failure to diagnose and treatment Plaintiff for Lyme disease could not have been a proximate cause, or substantial contributing factor of, Plaintiff's Optic Neuritis.

After careful consideration of the medical records in evidence and the testimony of Mr. Hamandi, Dr. Joseph, Dr. Di Marco, Dr. Felder, Dr. Wormser and Dr. Heyman, the Court finds that Plaintiff has not proven by a preponderance of the evidence that when he went to the prison infirmary on May 15, 2000 (or any time thereafter), he had Lyme disease. As such, Plaintiff cannot establish by a preponderance of the evidence that Defendant failed to timely diagnose and treat Plaintiff for Lyme disease or that it was Defendant's failure to timely diagnose and treat Plaintiff for Lyme Disease that caused Plaintiff's Optic Neuritis, and judgment must be granted in favor of Defendant and against Plaintiff. Specifically in support of our conclusion that Plaintiff did not have Lyme disease on or after May 15, 2000, and therefore, Defendant neither failed to timely diagnose and treat Plaintiff for Lyme disease nor did said failures cause Plaintiff's Optic Neuritis are: (1) the above-summarized testimony of Drs. Wormser and Heyman; (2) the negative results of the Western Blot tests for the presence of Lyme disease; (3) the negative results of the lumbar puncture tests for presence of Lyme disease; and (4) the numerous MRIs which, according to Dr. Heyman, are consistent with a diagnosis of Multiple Sclerosis and are not consistent with a diagnosis of Lyme disease.

Moreover, with respect to the results of the Western Blot tests, to the extent Plaintiff has argued, through the testimony of Drs. Joseph and DiMarco, that the Western Blot tests were false negative due to Plaintiff's use of Prednisone and antibiotics, prior to the administration of the tests, we find their testimony not credible. To the contrary, we find credible the testimony of Drs. Wormser and Heyman, who explained that the amount of prednisone and antibiotics taken by Plaintiff prior to the administration of the Western Blot tests were not significant enough dosages to affect the results of the tests.

Additionally, we find that while Plaintiff testified at trial that he went to the prison's doctor to complain of flu-like symptoms before May 15, 2000, and in support of this testimony, introduced documents from the Federal Medical Center, Rochester Minnesota, that show that Plaintiff was prescribed Acetaminophen for pain and/or fever on April 24 and May 1, in fact, these exhibits do not support Plaintiff's contention. First, the record shows that on April 24 and May 1, *2000*, Plaintiff was still at FCI McKean, whereas on April 24 and May 1, *2001*, Plaintiff was in Minnesota. Second, Plaintiff's medical records from FCI McKean do not show Plaintiff visiting the prison infirmary on either April 24, 2000 or May 1, 2000. Therefore, the Court finds Plaintiff's testimony that he suffered from flu-like symptom in the weeks leading up to May 15, 2000 not to be credible.

IV. Conclusion.

The Court having found that Plaintiff has not proven by a preponderance of the evidence that Defendant failed to timely diagnose and treat Plaintiff for Lyme disease, or that said failure caused Plaintiff's Optic Neuritis, judgment must be entered in favor of Defendant and against Plaintiff. An appropriate Order will follow this Opinion.

Date: August 14, 2007

Maurice B. Cohill, Jr.
Senior United States District Judge